Sheet	1	of	1
JIICCL		UI _	r

Substitute Form PTO-1449 (Modified)

U.S. Department of Commerce

Attorney's Docket No. 07763-057001

Application No. 10/791,502

Information Disclosure Statement by Applicant (Use several sheets if necessary) Applicant Fred R. Kramer, et al.

Filing Date
March 2, 2004

Group Art Unit 1637

(37 CFR §1.98(b))

U.S. Patent Documents Filing Date Examiner Desig. Document **Publication** Initial D Number Date Patentee Class **Subclass** If Appropriate AA AB AC AD ΑE ΑF AG AH AI ΑJ AK

	Foreign Patent Documents or Published Foreign Patent Applications							
Examiner	Desig.	Document	Publication	Country or			Trans	lation
Initial	ID	Number	Date	Patent Office	Class	Subclass	Yes	No
	AL							
	AM					-		
	AN							
	AO							
	AP							

	Other Documents (include Author, Title, Date, and Place of Publication)					
Examiner	Desig.					
Initial	ID	Document				
SP	AQ	V. A. Bloomfield, D. M. Crothers and I. Tinoco, Jr., Nucleic Acids: Structure, Properties, and Functions (1999); Ch. 8, pps. 258-333 entitled "Conformational Changes", by D. H. Turner.				
SP	AR	D. Freifelder, <i>Physical Biochemistry</i> , <i>Second Edition</i> (1982) "The Concept of Native and Denatured Structures"; pps. 19 -29				
	AS					
	AT					

Examiner Signature	/Suchira Pande/	Date Considered 09/11/2006				
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.						

Substitute Form PTO 1449

U.S. Pepartment of Commerce (Modified)

U.S. Pepartment of Commerce (Modified)

U.S. Pepartment of Commerce (Modified)

Information DRABSeure Statement by Applicant (Use several sheets if necessary)

(Use several sheets if necessary)

(37 CFR §1.98(b))

Attorney's Docket No. (O7763-057001 10/791,502

Applicant Fred R. Kramer, et al. (Use several sheets if necessary)

Filing Date (Group Art Unit 1637)

	U.S. Patent Documents						
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
SP	AA	5,607,834	Mar. 4, 1997	Bagwell		-	
SP	AB	6,331,438B1	Dec. 18, 2001	Aylott et al.			
	AC						
	AD						
	AE						
	AF						
	·AG						
	АН						
	AI						
	· AJ						
•	AK						

	Foreign Patent Documents or Published Foreign Patent Applications							
Examiner	Desig.	Document	Publication	Country or			Trans	lation
Initial	ID	Number	Date	Patent Office	Class	Subclass	Yes_	No
	AL							
	AM							
	AN							
	AO							
	AP							

(Other Documents (include Author, Title, Date, and Place of Publication)					
Examiner Initial	Desig. ID	Document				
	AQ	·				
	AR					
	AS					
	AT					

Examiner Signature	/Suchira Pande/	Date Considered 09/11/2006
EXAMINER: Initials citation of next communication to applic		ot in conformance and not considered. Include copy of this form with

Substitute Form PTO-1449 (Modified)

U.S. Department of Commerce Patent and Trademark Office

Attorney's Docket No. 07763-057001

Application No.

Information Disclosure Statement by Applicant (Use several sheets if necessary)

Applicant

Fred R. Kramer, Sanjay Tyagi, Salvatore A.E. Marras and Hiyam Elhajj Trunfio

Filing Date

(37 CFR §1.98(b))

Group Art Unit 1637

	U.S. Patent Documents						
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Ciass	Subclass	Filing Date If Appropriate
SP	AA	5,925,517	Jul. 20, 1999	Tyagi et al.			
SP	AB	6,150,097	Nov. 21, 2000	Tyagi et al.			
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

	Foreign Patent Documents or Published Foreign Patent Applications							
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office			Trans	lation
minai	10	INUITIDEI	Date	Paterit Office	Class	Subclass	Yes	No
SP	AL	WO/00/14278	Mar. 16, 2000	WIPO				
	AM							
	AN							
	AO							
	AP							

(Other Documents (include Author, Title, Date, and Place of Publication)					
Examiner Initial	Desig. ID	Document				
SP	AQ	Adessi, et al. "Solid phase DNA amplification: characterisation of primer attachment and amplification mechanisms" Nucleic Acids Research, (2000) Vol. 28, No. 20 e87				
SP	AR	Albert et al, "Automatic decoding of sensor types within randomly ordered, high-density optical sensor arrays" Analytical and Bioanalytical Chemistry, (August 2002) Vol. 373, No. 8, pp. 792 - 802				
SP	AS	Bonnet, et al. "Thermodynamic basis of the enhanced specificity of structured DNA probes", <i>Proc. Natl. Acad. Sci.</i> (May 1999) Vol. 96, pp. 6171-6176				
SP	АТ	Braeckmans, et al. "Encoding Microcarriers: Present and Future Technologies" Nature Publishing Group, Nature Reviews, (June 2002) Vol. 1 pp. 447-456				

Examiner Signature	/Suchira Pande/	Date Considered 09/11/2006				
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.						

Substitute Form PTO-1449 (Modified)

(37 CFR §1.98(b))

U.S. Department of Commerce Patent and Trademark Office

Attomey's Docket No. 07763-057001

Application No.

Information Disclosure Statement by Applicant (Use several sheets if necessary)

Applicant

Fred R. Kramer, Sanjay Tyagi, Salvatore A.E.

Marras and Hiyam Elhajj Trunfio

Filing Date

Group Art Unit

	Other D	ocuments (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID			
SP	AU	Brenner, et al. "Gene expression analysis by massively parallel signature sequencing (MPSS) on microbead arrays" Nature Biotechnology, (June 2000) Vol. 18, pp. 630-634		
SP	AV	Brown, et al. "Molecular beacons attached to glass beads fluoresce upon hybridisation to target DNA" Chem. Commun. (2000), 621-622		
SP	AW	Call, et al. "Fabrication of DNA Microarrays Using Unmodified Oligonucleotide Probes" BioTechniques, (February 2001) 30: 368-379		
SP	AX	Chen, et al. "A Microsphere-Based Assay for Multiplexed Single Nucleotide Polymorphism Analysis Using Single Base Chain Extension" Genome Research (2000) 10: 549-557		
SP	AY	Danowski, et al. "Evaluating the chemical spatial resolution of imaging fiber chemical sensors" Microchemical Journal (2001) 70: 51-61		
SP	AZ	Dickinson, et al. "Convergent, Self-Encoded Bead Sensor Arrays in the Design of an Artificial Nose" Analytical Chemistry, (June 1, 1999) 71: 2192-2198		
SP	AAA	Epstein, et al. "High-Density Fiber-Optic Genosensor Microsphere Array Capable of Zeptomole Detection Limits" Analytical Chemistry (2002) 74: 1836-1840		
SP	ABB	Epstein, et al. "Combinatorial Decoding: An approach for Universal DNA Array Fabrication" J. Am. Chem. Soc. (2003) 125: 13753-13759		
SP	ACC	Ferguson, et al. "A fiber-optic DNA biosensor microarray for the analysis of gene expression" Nature Biotechnology (December 19996) 14: 1681-1684		
SP	ADD	Ferguson, et al. "High-Density Fiber-Optic DNA Random Microsphere Array" Analytical Chemistry (November 2000) 72: 5618-5624		
SP	AEE	Guo, et al. "Direct fluorescence analysis of genetic polymorphisms by hybridization with oligonucleotide arrays on glass supports" Nucleic Acids Research, (1994) 22: 5456-5465		
SP	AFF	Han, et al. "Quantum-dot tagged microbeads for multiplexed optical coding of biomolecules" Neuter Biotechnology (July 2001) 19: 631-635		
SP	AGG	Kellar, et al. "Multiplexed microsphere-based flow cytometric assays" Experimental Hematology (2002) 30: 1227-1237		
SP	АНН	Lee, et al. "Importance of replication in microarray gene expression studies: Statistical methods and evidence from repetitive cDNA hybridizations" PNAS (August 29, 2000) 97: 9834-9839		
SP	AII	Liu, et al. "Molecular Beacons for DNA Biosensors with Micrometer to Submicrometer Dimensions" Analytical Biochemistry (2000) 283: 56-63		
SP	AJJ	Lui, et al. "A fiber-Optic Evanescent Wave DNA Biosensor Based on Novel Molecular Beacons" Analytical Chemistry (1999) 71: 5054-5059		
SP	AKK	Marras, et al. "Efficiencies of fluorescence resonance energy transfer and contact-mediated quenching in oligonucleotide probes" Nucleic Acids Research (2002) 30: e122		
SP	ALL	Michael, et al. "Randomly Ordered Addressable High-Density Optical Sensor Arrays" Analytical Chemistry (1998) 70: 1242-1248		
SP	AMM	Miller, Kelli "Downsizing DNA Assays Pharmaseq's microtransponders prove that bigger isn't always better" The Scientist (2002) 16[1]: 52		
SP	ANN	Nicewarner-Pena, et al. "Submicrometer Metallic Barcodes" Science (2001) 294: 137-141		
SP	A00	Oliphant, et al. "BeadArray™ Technology: Enabling an Accurate, Cost-Effective Approach to High-Throughput Genotyping" BioTechniques (June 2002) 32: S56-S61		

Examiner Signature /Suchira Pande/	Date Considered 09/11/2006
EXAMINER: Initials citation considered. Draw line through citation if no next communication to applicant.	it in conformance and not considered. Include copy of this form with

Substitute Form PTO-1449 (Modified)

U.S. Department of Commerce Patent and Trademark Office

Attorney's Docket No. 07763-057001

Application No.

Information Disclosure Statement by Applicant (Use several sheets if necessary)

Applicant

Fred R. Kramer, Sanjay Tyagi, Salvatore A.E.

Marras and Hiyam Elhajj Trunfio

(37 CFR §1.98(b))

Filing Date **Group Art Unit**

	Other Documents (include Author, Title, Date, and Place of Publication)					
Examiner Desig.		Document				
SP	APP	Rosenthal, Sandra J. "Bar-coding biomolecules with fluorescent nanocrystals" Nature Biotechnology (2001) 19: 621-622				
<u> </u>	AQQ	Spiro, et al. "A Bead-Based Method for Multiplexed Identification and Quantitation of DNA Sequences Using Flow Cytometry" Applied and Environmental Microbiology (2000) 66: 4258-4265				
	ARR	Spruill, et al. "Assessing Sources of Variability in Microarray Gene Expression Data" BioTechniques (2002) 33: 916-923				
	ASS	Steemers, et al. "Screening unlabeled DNA targets with randomly ordered fiber-optic gene arrays" Nature Biotechnology (2000) 18: 91-94				
	ATT	Tsagkatakis, et al. "Spatial and Spectral Imaging of Single Micrometer-Sized Solvent Cast Fluorescent Plasticized Ploy(vinyl chloride) Sensing Particles" Analytical Chemistry (2001) 73: 315320				
	AUU	Tyagi et al, "Molecular Beacons: Probes that Fluoresce upon Hybridization" Nature Biotechnology (1996) 14: 303-308				
	AVV	Tyagi et al. "Multicolor molecular beacons for allele discrimination" Nature Biotechnology (1998) 16: 49-53				
	AWW	Tyagi et al. "Taking a census of mRNA populations with microbeads" Nature Biotechnology (20 18: 597-598				
	AXX	Walt, David R. "Bead-based Fiber-Optic Arrays" Science (2000) 287: 451-452				
	AYY	Walt, David R. "Imaging optical sensor arrays" Current Opinion in Chemical Biology (October 2002) 6: 689-695				
	AZZ	Yang, et al. "BADGE, <u>BeadsArray</u> for the <u>Detection of Gene Expression</u> , a High-Throughput Diagnostic Bioassay" Genome Research (2001) 11: 1888-1898				
$\overline{\mathbf{V}}$	AAAA	Yeakley, et al. "Profiling alternative splicing on fiber-optic arrays" Nature Biotechnology (2002) 20: 353-358				
SP	ABBB	PharmaSeq, Inc. "Animation: Principle of Microtransponder-Based Assay" htti://www.pharmaseq.com/tech.html#desc (pp. 1-3)				

Examiner Signature	/Suchira Pande/	Date Considered 09/11/2006				
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.						